

REMARKS

I. Status of the Application

Claims 1-40 are pending in this application. In the December 23, 2003 office action, the Examiner:

1. Objected to the Specification because of informalities;
2. Withdrew claims 1-15 and 27-40 from consideration as being drawn to a non-elected invention;
3. Rejected claims 16-19 and 25 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. U.S. 5,619,142 to Schweer et al. (“Schweer”);
4. Rejected claim 26 under 35 U.S.C. § 103(a) as allegedly being obvious over Schweer in view of Horowitz & Hill, The Art of Electronics (Cambridge University Press, 1989) (“Horowitz and Hill”); and
5. Deemed claims 20-24 allowable if rewritten to incorporate all of the limitations of the base claim and any intervening claim.

In this response, applicants have canceled claims 1-36 without prejudice, and have added new claims 41-60. Applicants request reconsideration and allowance of the claims in view of the foregoing amendments and the following remarks. Applicants further request reconsideration of the withdrawn claims 37-40 in light of cancellation of claims 1-36.

II. Applicants Have Addressed the Informalities in the Specification

In the June 1, 2004 office action, the Examiner noted an informality in the energy equation on page 2 of the specification. In particular, the Examiner noted “Page 2 of the

specification, as amended in the reply of 3-26-2004, recites an equation for energy use which is appears to be missing a sample time differential value". Applicants have amended this paragraph to include the value T_n , which is the sample period. This provides the sample time differential value requested by the Examiner. Thus, if the sampling rate is increased, then the sample period will decrease and the overall energy value will not change.

In view of the foregoing, it is respectfully submitted that the Examiner's objections to the disclosure have been addressed.

III. Reinstatement of Claims 37-40 is Appropriate

Claims 37-40 have been withdrawn pursuant to a constructive election of claims 16-26. (See Final Office Action dated June 1, 2004 at pp.2-3). Claims 16-26 have been canceled in this amendment, and therefore the restriction requirement in the June 1, 2004 Final office action is moot. The Examiner is hereby notified, however, that new claims 41-51 are similar in many ways, but not all ways, to claims 16-26.

Upon reinstatement of the claims, claims 37-40 are allowable over the prior art for the reasons set forth in the Response to Office Action dated March 23, 2004.

IV. New Claims 41-54 and 60 are Allowable Over the Prior Art

Claim 41 is allowable over the prior art. Claim 41 is similar to, but not identical to, canceled claim 16.

Claim 16 stands rejected over Schweer. In a prior paper, the Applicant maintained that claim 16 was allowable because, among other things, Schweer failed to

show a processing device operable to adjust a “sampled current value” or “sampled voltage value” as claimed. Schweer teaches the adjustment of RMS amplitude values, which are not sample values. (March 23, 2004 Response to Office Action at pp.13-14).

In the Final Office Action dated June 1, 2004, the Examiner disagreed. The Examiner interpreted the phrase “sampled current value or sampled voltage value” to include *any* voltage or current value *derived* from sampling. (Final Office Action at pp.8-9). In other words, an RMS voltage amplitude constitutes a “sampled voltage value” *if* the RMS value is derived from samples.

Claim 41 represents an amended version of claim 16, wherein the “sampled current value” and “sample voltage value” language has been deleted. Instead, the processor device is operable to adjust at least one electricity consumption measurement value, wherein the electricity consumption measurement value comprises *a waveform sample* derived from either a voltage waveform or a current waveform.

Thus, the processing device adjusts a value that is in the form of a *waveform sample*. A waveform sample as that term is known in the art, and which is consistent with the disclosure, is an instantaneous value of a waveform. (See application, elements 42 of Fig. 2). An RMS voltage value is not an instantaneous value of a waveform, but rather is a statistical value derived from several samples. An RMS voltage value may be derived from several waveform samples, but it is *not* a waveform sample.

For the foregoing reason, claim 41 is allowable over Schweer. Claims 42-54 and 60 all depend from an incorporate the limitations of claim 41. Accordingly, claims 42-54 and 60 are allowable over the prior art for at least the same reasons.

V. Claims 55-59

Claim 55 represents claim 20 rewritten in independent format to incorporate all of the limitations of the base claim and any intervening claims. In the Final Office Action, claim 20 was deemed allowable. Accordingly, claim 55 is allowable over the prior art. Claims 56-59 depend from an incorporate all of the limitations of claim 55 and are therefore patentable for at least the same reasons.

VI. Conclusion

For all of the foregoing reasons, it is respectfully submitted that the application is in a condition for allowance. Favorable reconsideration and allowance of this application is, therefore, earnestly solicited.

Respectfully Submitted,



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